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Fig. 1
CARRIER BORNE ENERGY SPECTRUM

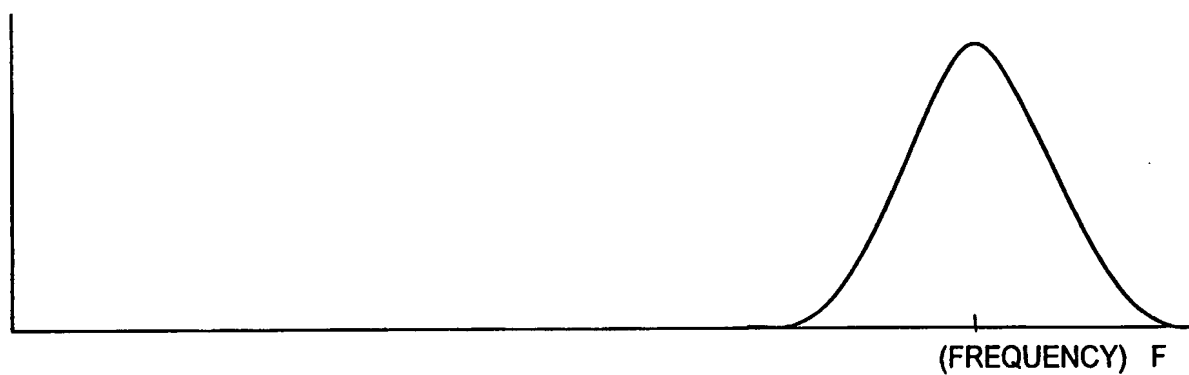
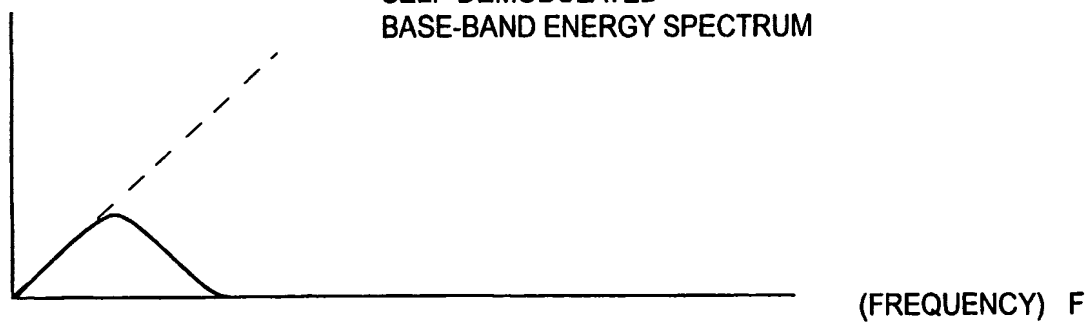


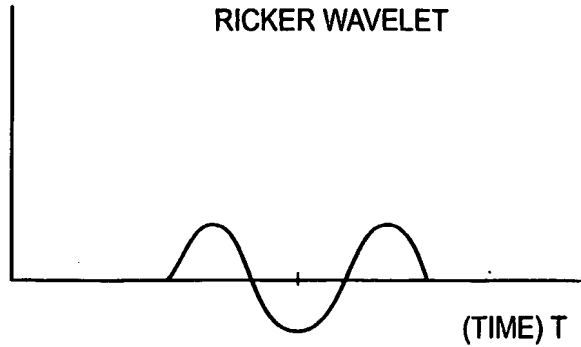
Fig. 2
SELF-DEMODULATED
BASE-BAND ENERGY SPECTRUM



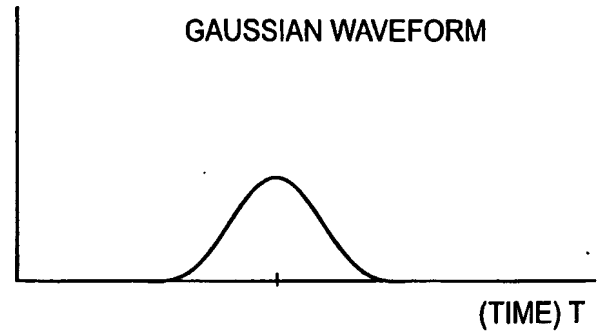
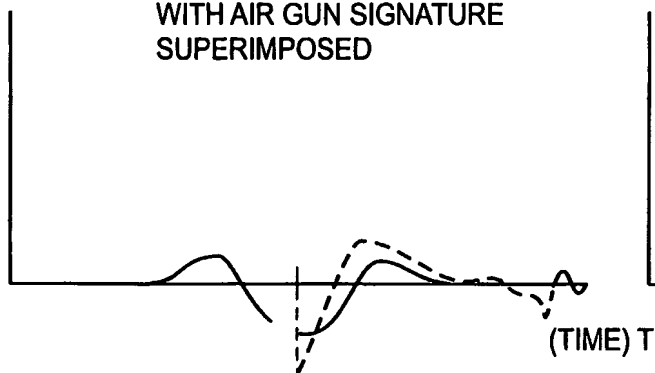
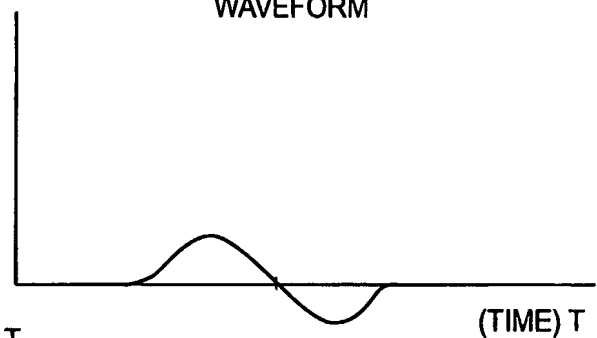
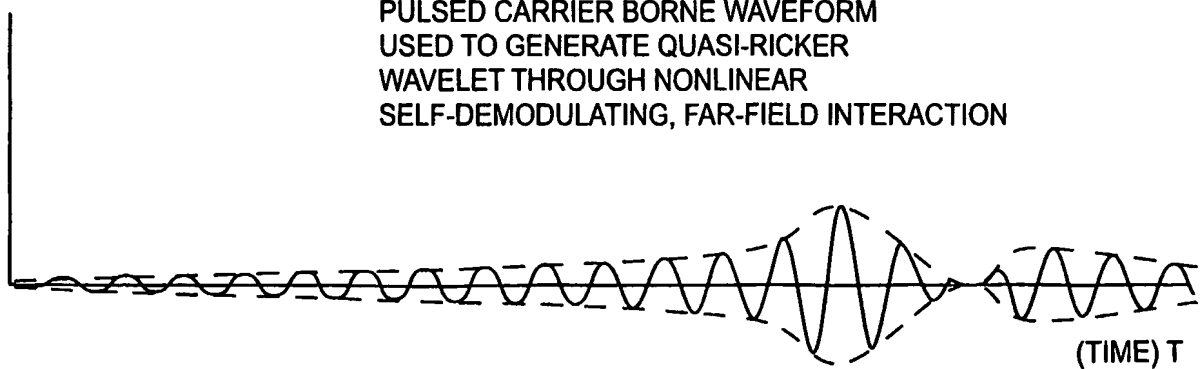
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Fig. 3

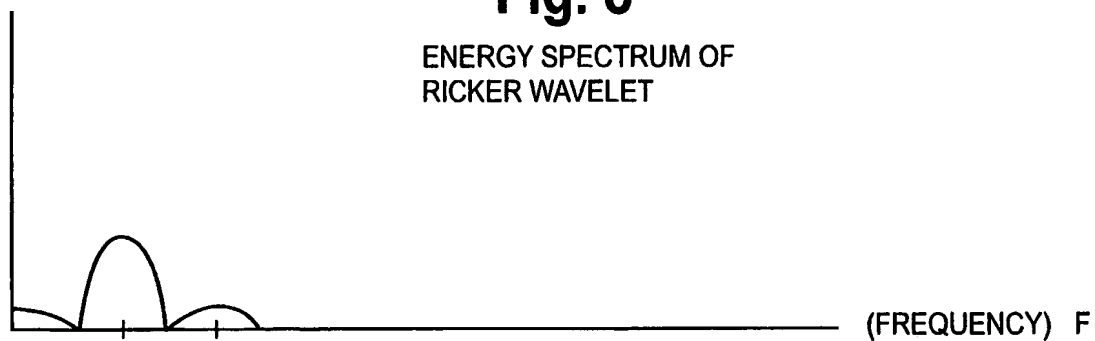
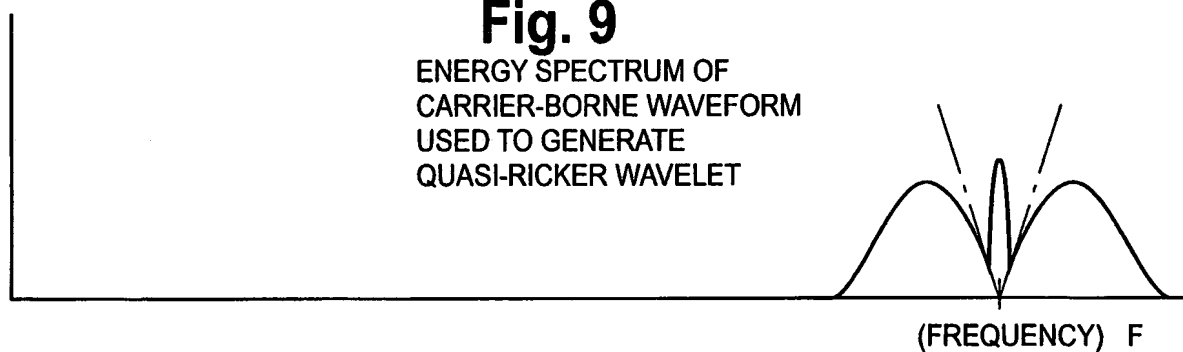
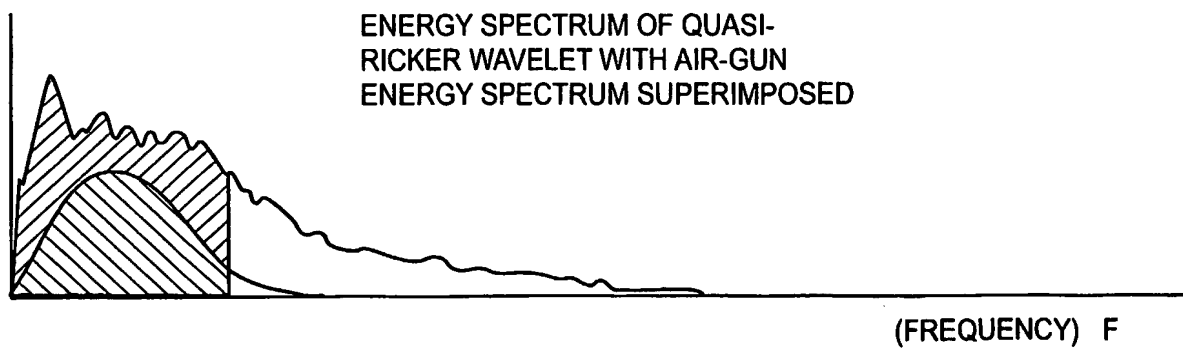
RICKER WAVELET

**Fig. 4**

GAUSSIAN WAVEFORM

**Fig. 6**SECOND DERIVATIVE OF
GAUSSIAN WAVEFORM
(QUASI-RICKER WAVELET)
WITH AIR GUN SIGNATURE
SUPERIMPOSED**Fig. 5**FIRST DERIVATIVE
OF GAUSSIAN
WAVEFORM**Fig. 7**PULSED CARRIER BORNE WAVEFORM
USED TO GENERATE QUASI-RICKER
WAVELET THROUGH NONLINEAR
SELF-DEMODULATING, FAR-FIELD INTERACTION

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Fig. 8ENERGY SPECTRUM OF
RICKER WAVELET**Fig. 9**ENERGY SPECTRUM OF
CARRIER-BORNE WAVEFORM
USED TO GENERATE
QUASI-RICKER WAVELET**Fig. 10**ENERGY SPECTRUM OF QUASI-
RICKER WAVELET WITH AIR-GUN
ENERGY SPECTRUM SUPERIMPOSED

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Fig. 11

PREDISTORTED (I.E., FIRST-DERIVATIVE)
GAUSSIAN WAVEFORM PLUS DC OFFSET

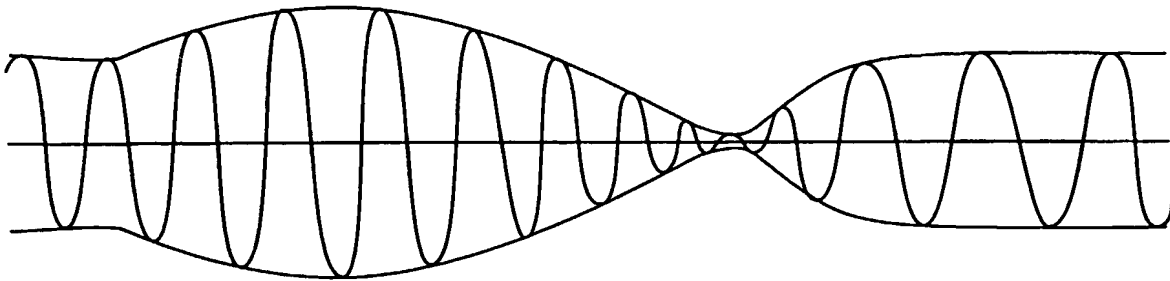


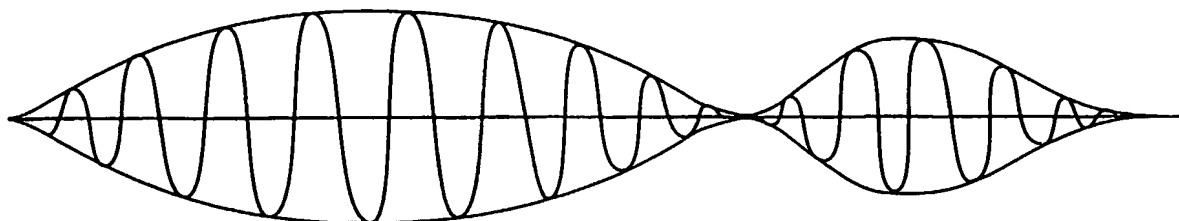
Fig. 12

TAPERED ENVELOPE
GATING FUNCTION

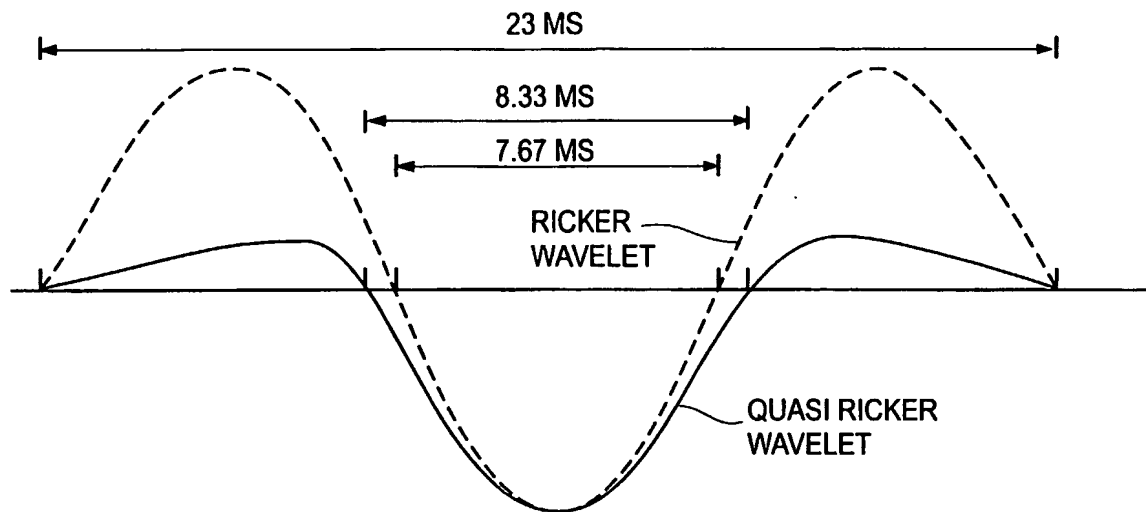
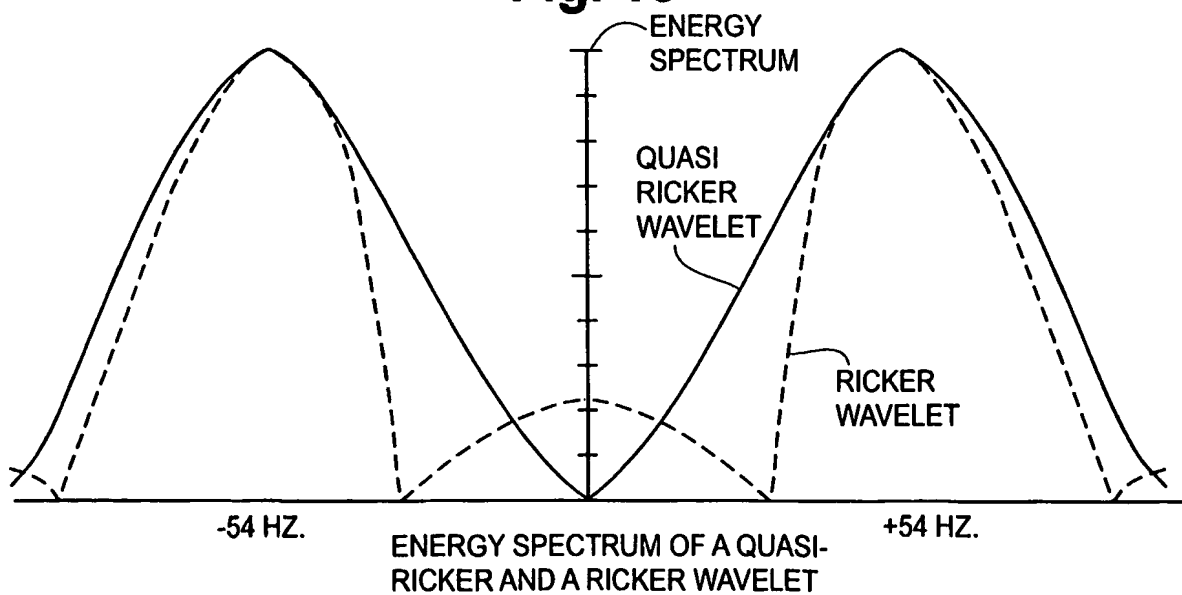


Fig. 13

COMPOSITE OF TAPERED GATING FUNCTION
AND PREDISTORTED GAUSSIAN WAVEFORM



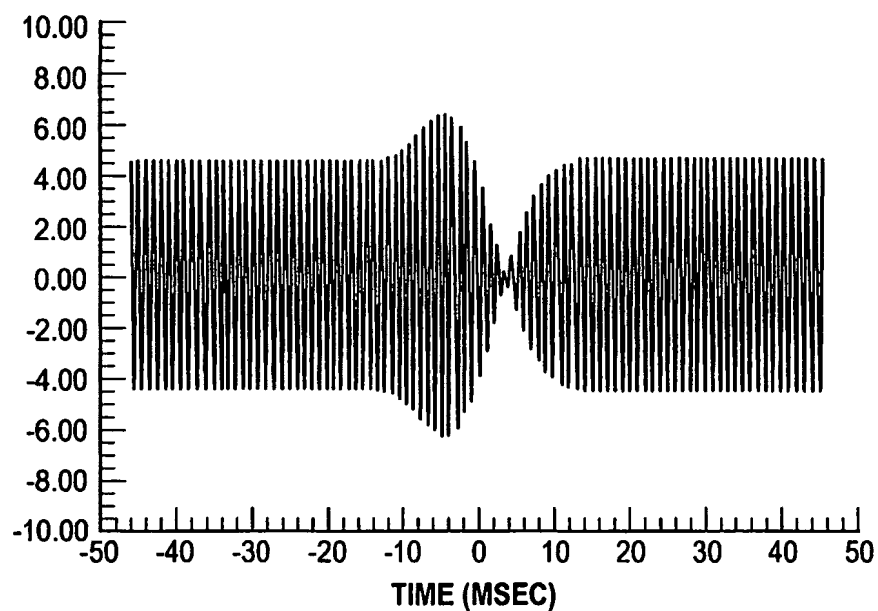
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Fig. 14TIME WAVEFORMS OF A QUASI-RICKER
WAVELET AND A RICKER WAVELET**Fig. 15**

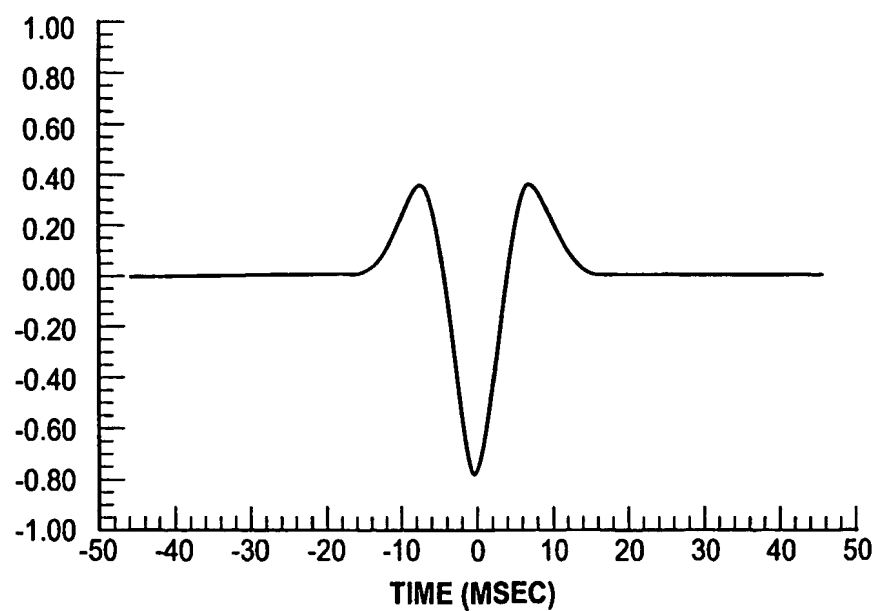
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Fig. 16

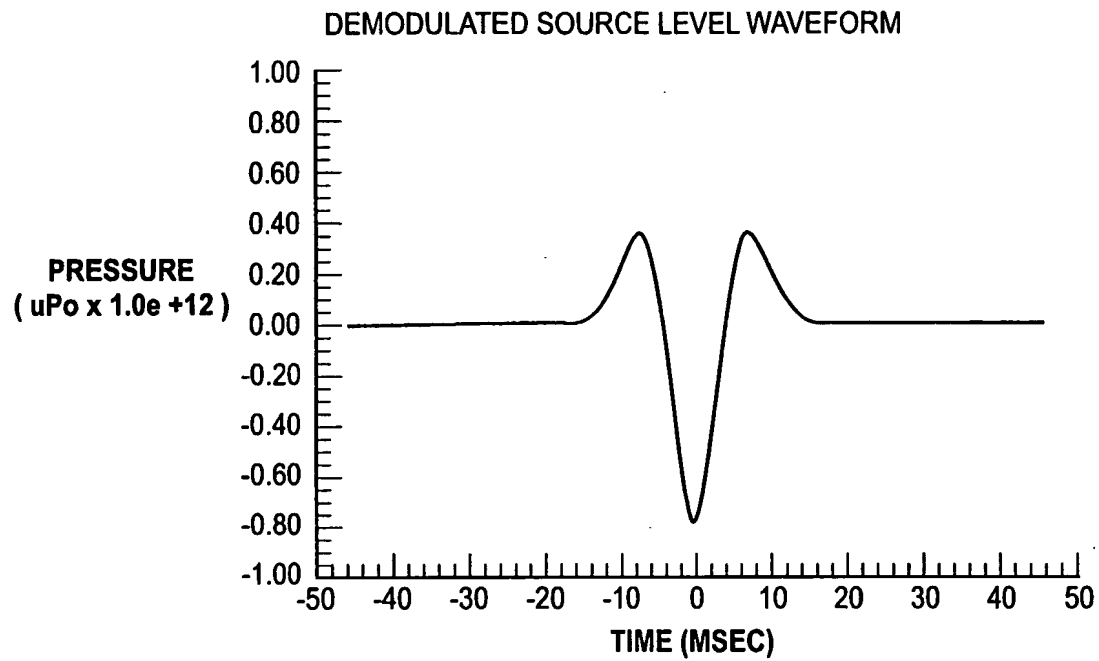
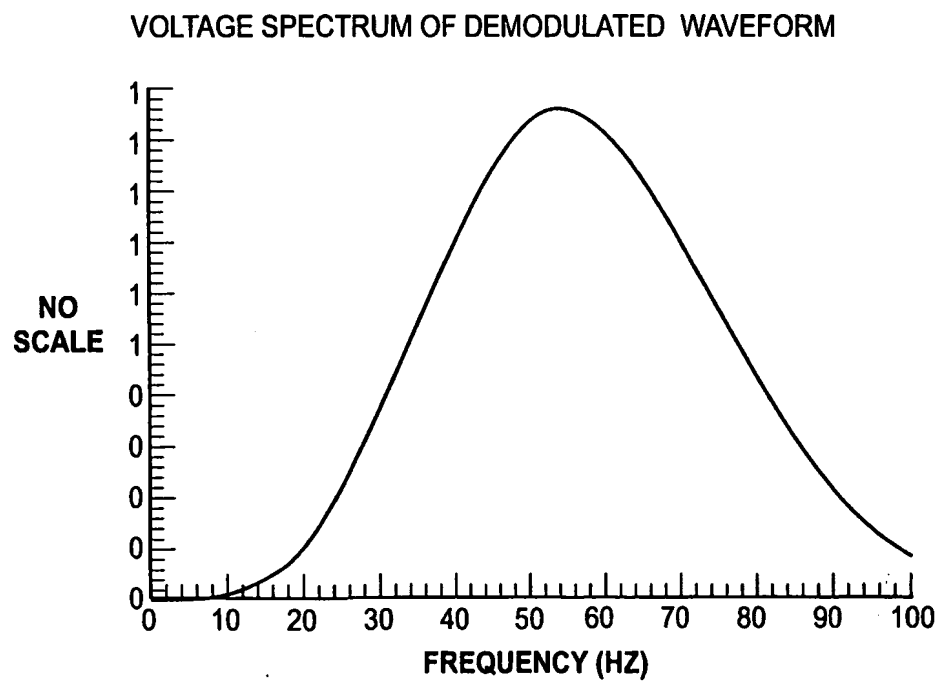
TRANSMITTED WAVEFORM

**Fig. 17**

DEMODULATED SOURCE LEVEL WAVEFORM



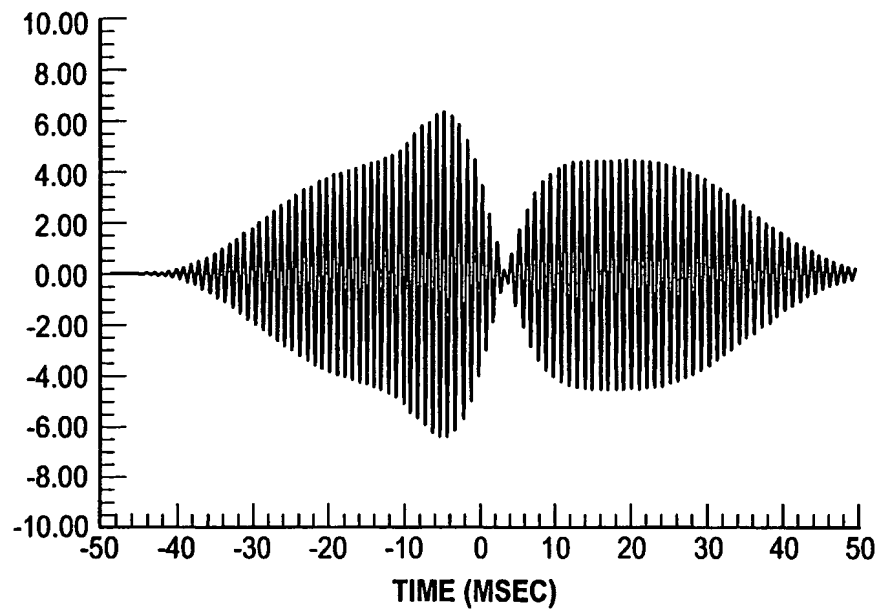
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Fig. 18**Fig. 19**

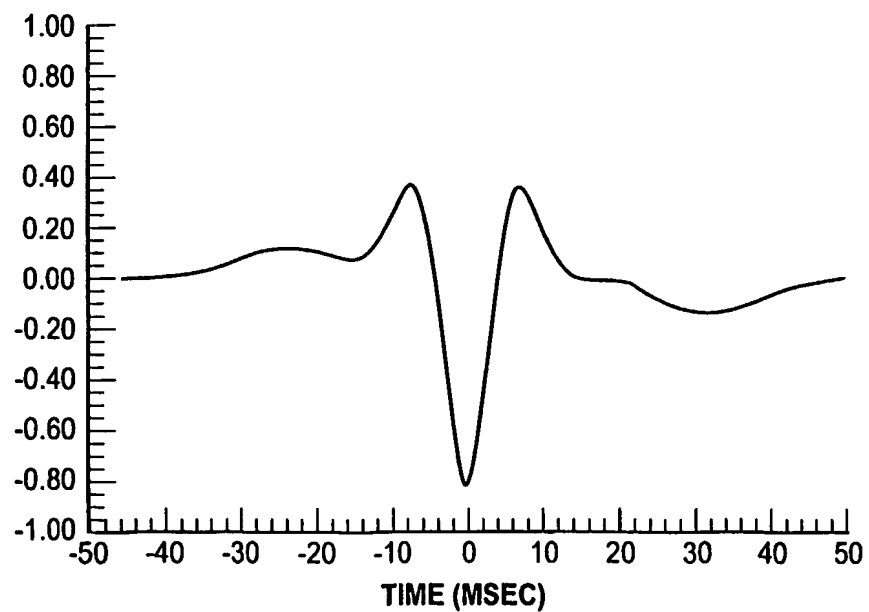
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Fig. 20

TRANSMITTED WAVEFORM

**Fig. 21**

DEMODULATED SOURCE LEVEL WAVEFORM



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Fig. 22

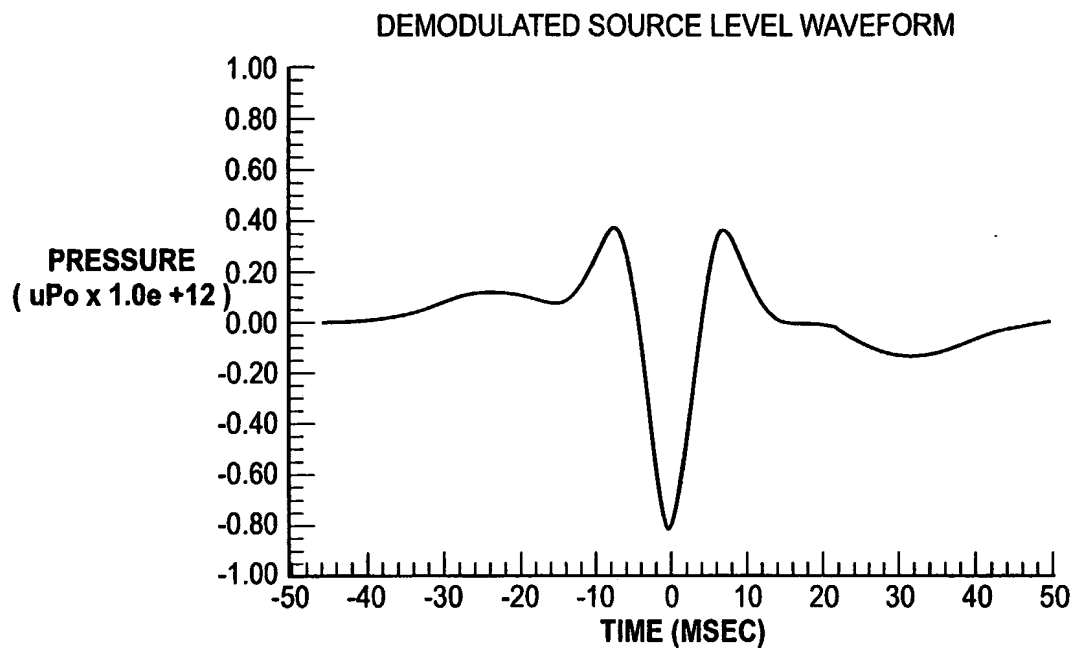
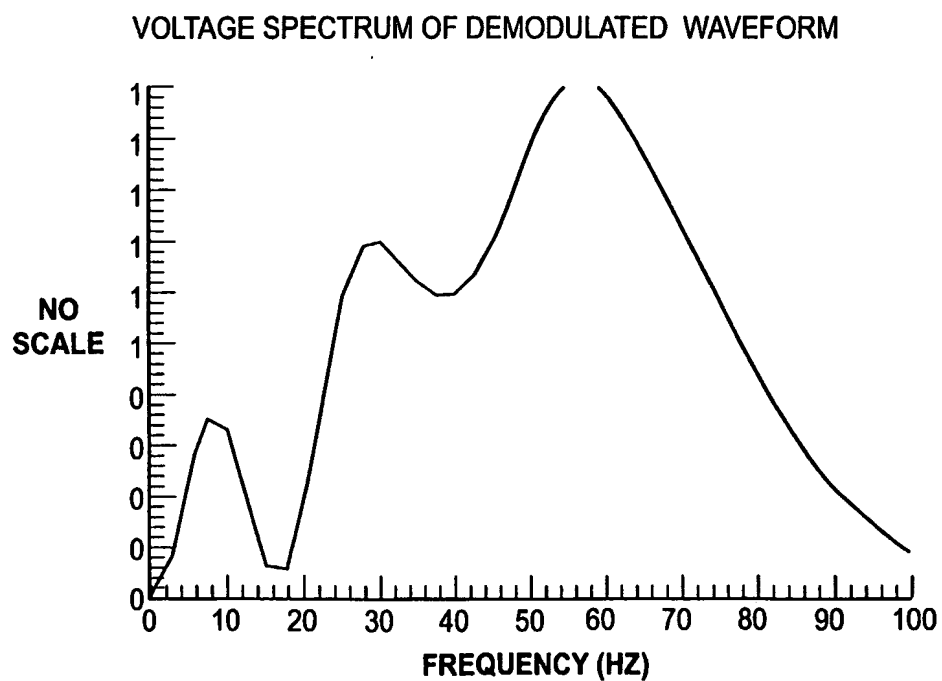


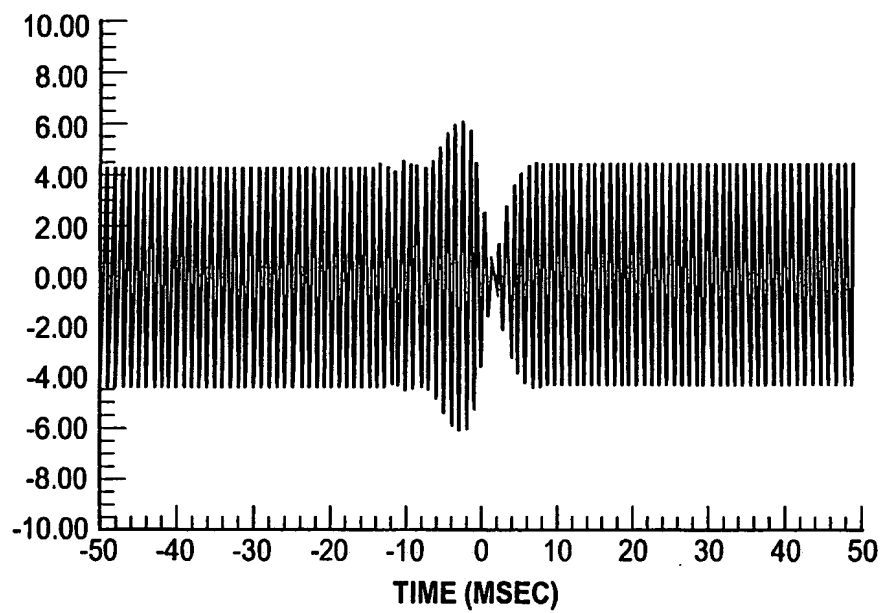
Fig. 23



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Fig. 24

TRANSMITTED WAVEFORM



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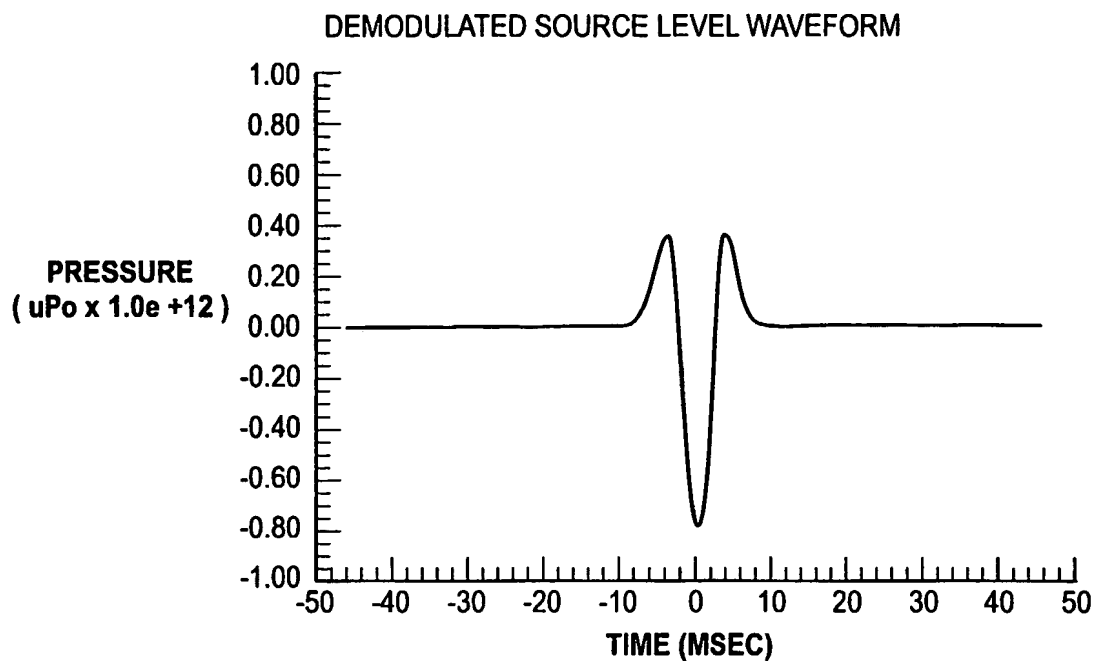
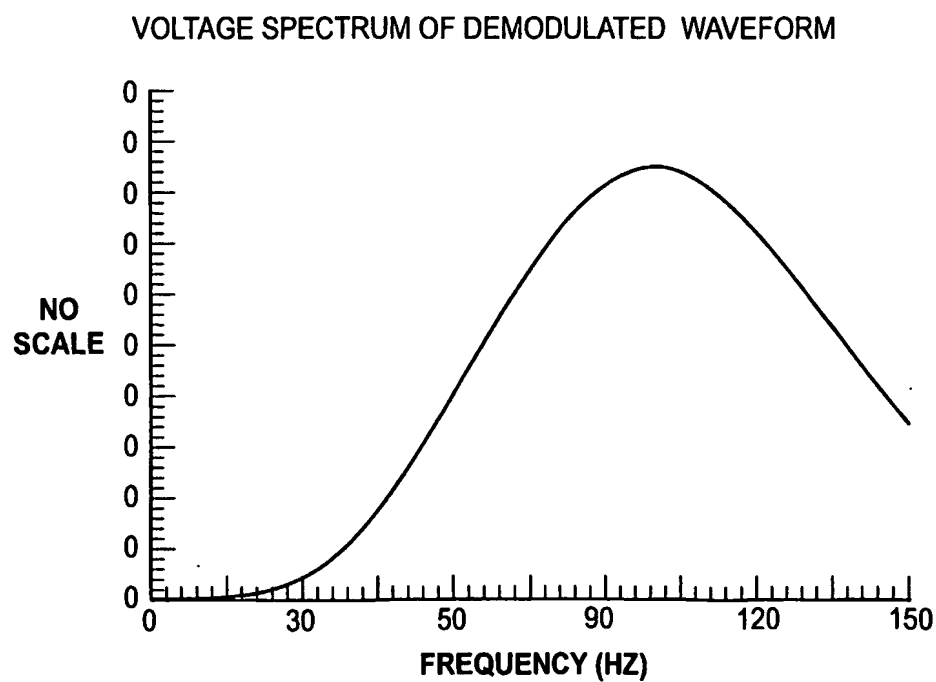
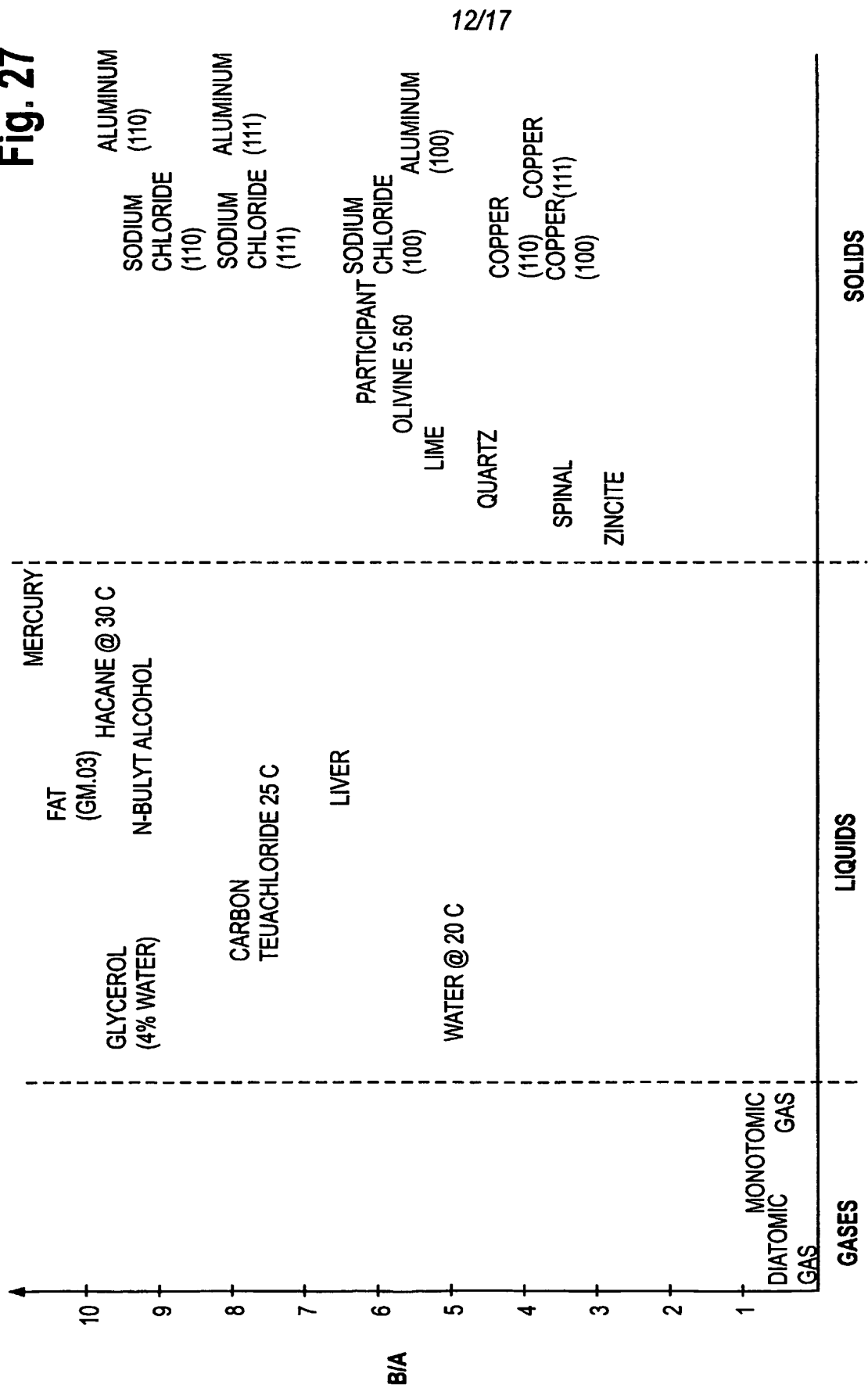
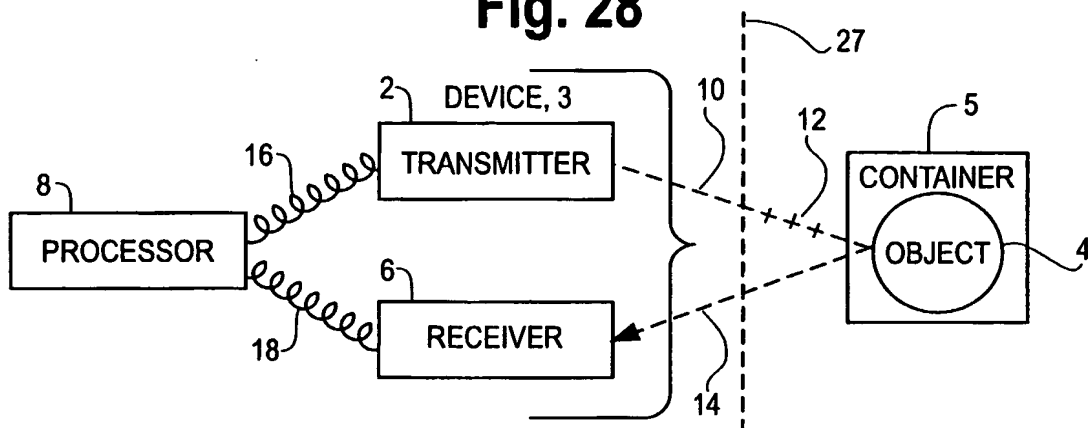
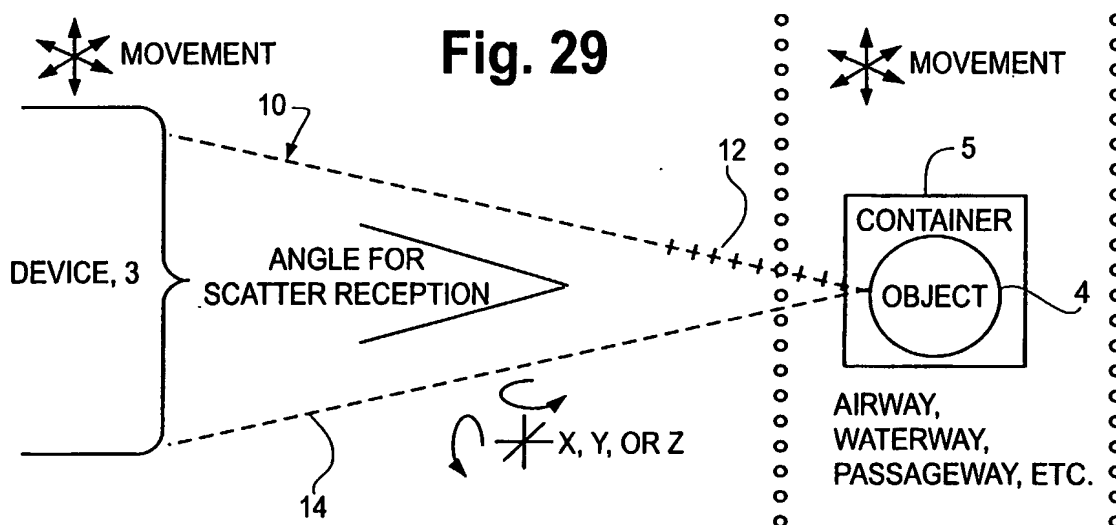
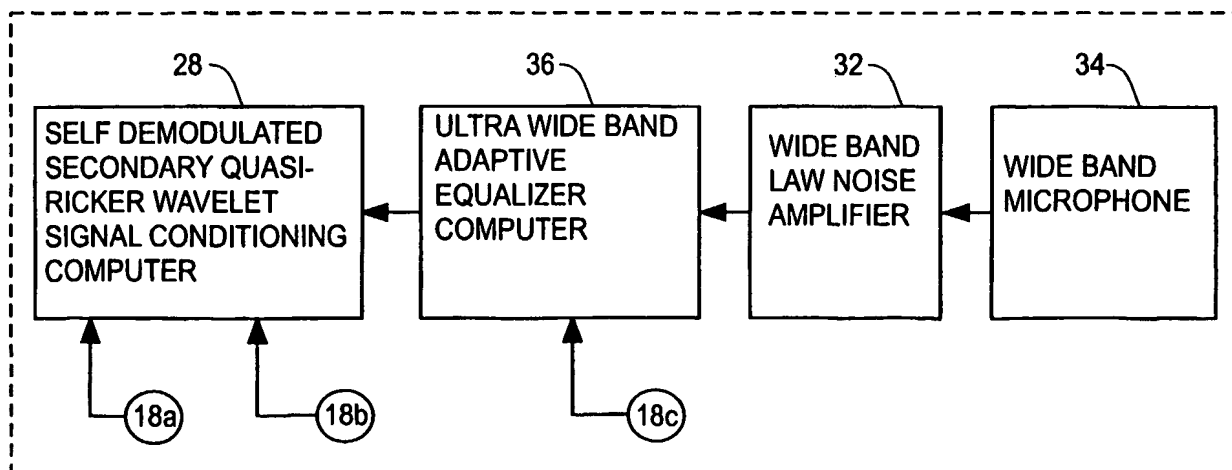
Fig. 25**Fig. 26**

Fig. 27



TYPICAL B/A-PARAMETER RATIOS
FOR GASES, LIQUIDS AND SOLIDS

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Fig. 28**Fig. 29****Fig. 30**

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Fig. 31

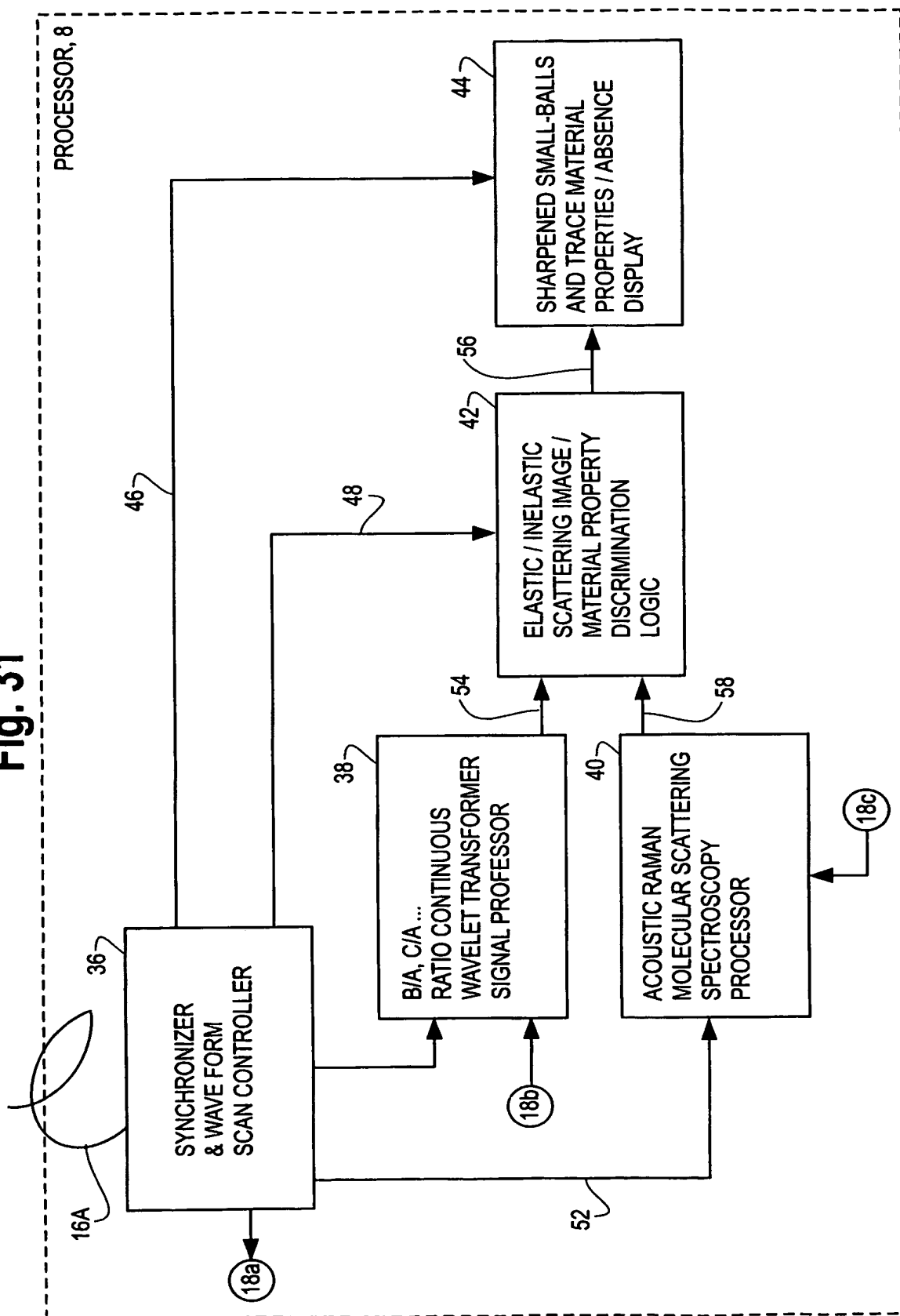
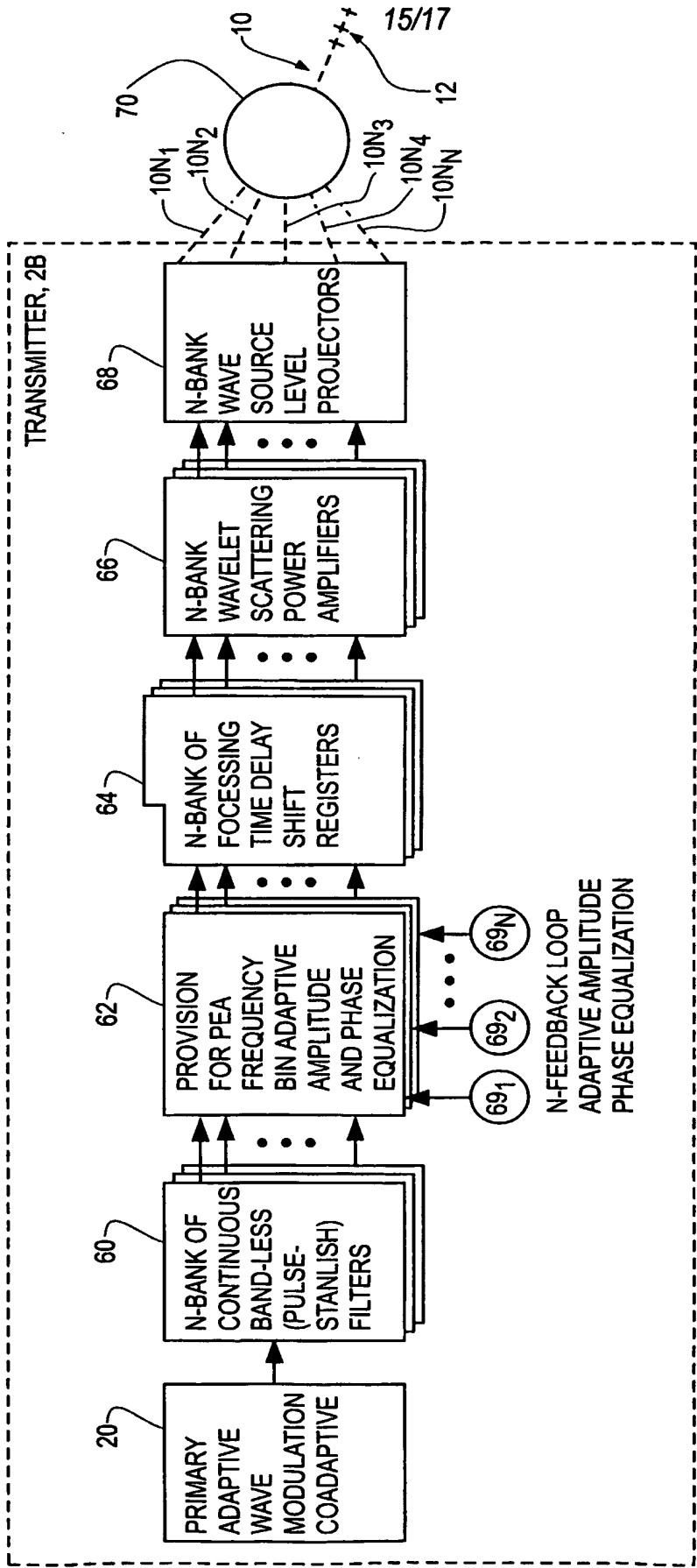


Fig. 32



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Fig. 33

FAR FIELD OF N-PROJECTOR ARRAY AND SECONDARY QUASI-RICKER WAVELET
FAR-FIELD NLS / SD INTERASDIGN

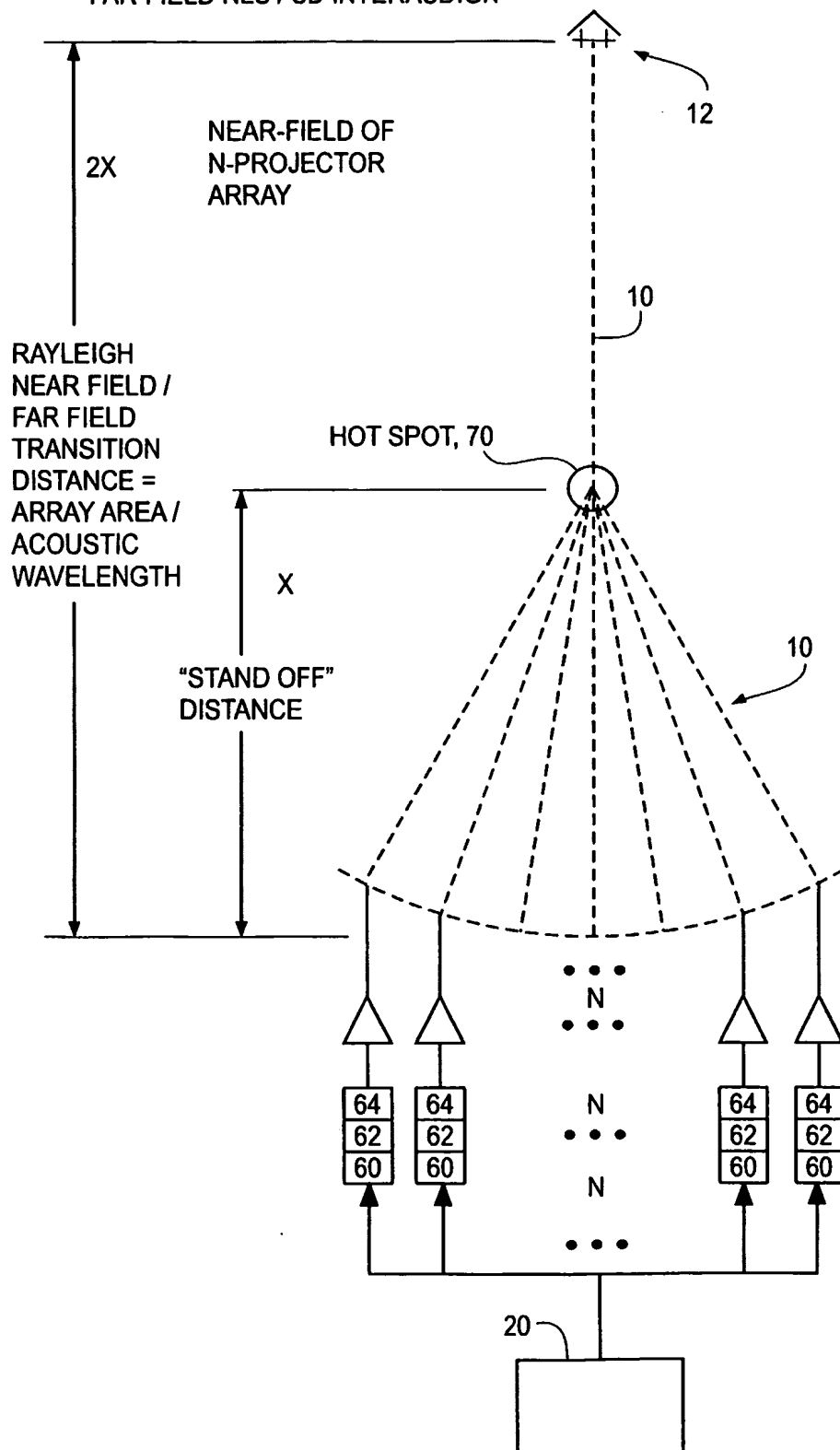


Fig. 34

